

RECEIVED
CENTRAL FAX CENTER

JAN 10 2005

Chen 1-18

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**Patent Application**

Applicant(s): Y. Chen et al.
Case: 1-18
Serial No.: 09/608,639
Filing Date: June 30, 2000
Group: 2828
Examiner: Cornelius H. Jackson

I hereby certify that this paper is being examined on this date via facsimile to
Examiner Cornelius H. Jackson of the United States Patent and Trademark Office at
(970) 279-1942.

Signature: *Linda L. Vulpis* Date: January 10, 2005

Please
Enter
C/H/J
3/23/05

Title: System Comprising Optical
Semiconductor Waveguide Device

LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

As per the request of Examiner Jackson, listed below are the pending claims of the above-identified application.

If any additional information is required, please contact the undersigned.

1. (Previously presented) An optical communication system comprising an external cavity laser that comprises:

a gain medium comprising an active region, the gain medium including an antireflective layer to prevent the laser from lasing off facets of the laser, the active region containing a quantum well to generate light, the quantum well having sides and cladding layers formed on the sides;

a tapered beam expanding region, optically coupled to the active region, the beam expanding region and being wider than the active region, the beam expanding region shaped to provide lateral broadening and vertical broadening or both;

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.